

PART A – COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
SFY 2002 COSTA-MACHADO WATER ACT OF 2000

CALFED Watershed Program

Application No. 214

PROJECT TITLE: Cottonwood Creek Watershed Management Planning Program

Project Region Indicate RWQCB #: 5

Multi-regional Project Indicate RWQCB #s:

Statewide Project

PROJECT DIRECTOR (one name only) Vieva Swearingen June 7, 2002
(MS., MR., DR.):

PRINT DATE

LEAD APPLICANT OR ORGANIZATION: (one name only) Cottonwood Creek Watershed Group

TYPE OF AGENCY:

Municipality Local Agency *Nonprofit (non-landowner) X

Nonprofit (landowner) Local Public Agency

STREET ADDRESS:

CITY: Cottonwood Zip Code:

P.O. BOX: 1198 Zip Code: 96022

COUNTY Shasta
STATE: California

PHONE NO.: (530) 347-6637 FAX NO.: (530) 347-6346

E-MAIL ADDRESS: ccwg@shasta.com FEDERAL TAX ID. NO.: 68-045 4530

PROJECT TYPE: Watershed Management Plan

LEGISLATIVE
INFORMATION

Senate District	<u>4</u>	Assembly District	<u>2</u>
		United States Congressional District	<u>2 and 3</u>

CALFED, RWQCB, or SWRCB STAFF CONTACTED REGARDING THIS PROPOSAL:

Contact:	<u>Dennis Heiman</u>	Contact:	<u>Dennis Bowker</u>
Phone No.:	<u>530/224-4851</u>	Phone No.:	<u>209/295-8611</u>
Dates contacted:	<u>June 3, 2002</u>	Dates contacted:	<u>June 4 & 6, 2002</u>

PRIMARY COOPERATING ENTITIES:

Entity Name:	<u>California Department of Fish and Game</u>	
Role/Contribution to Project:	<u>Technical Advisor</u>	
Contact Person:	<u>Steve Turek</u>	Phone No.: <u>530/225-2280</u>
E-mail address:	<u>STurek@dfg.ca.gov</u>	

Entity Name:	<u>U.S. Fish and Wildlife Service</u>	
Role/Contribution to Project:	<u>Technical Advisor</u>	
Contact Person:	<u>Jack Williamson</u>	Phone No.: <u>530/527-3043</u>
E-mail address:	<u>jackwilliamson@fws.gov</u>	

WATERBODY/WATERSHED (Include Catalog Number in Section 18 of the ARD):	<u>Lower Cottonwood: 18020102</u> <u>Cottonwood Headwaters: 18020113</u>
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GPS COORDINATES FOR PROJECT LOCATION, IF AVAILABLE:	<u>Entire Watershed</u>
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FISCAL SUMMARY:

Proposition 13 Funds Requested	<u>\$200,000</u>
Other Project Funds	<u>\$0</u>
Total Project Budget	<u>\$200,000</u>

CERTIFICATION

Please read before signing.

I certify under penalty of perjury that the information I have entered on this application is true and complete to the best of my knowledge and that I am entitled to submit the application on behalf of the applicant (if the applicant is an entity/organization). I further understand that any false, incomplete, or incorrect statements may result in the disqualification of this application. By signing this application, I waive any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in this RFP.

Applicant Signature

Date

Vieva Swearingen

Printed Name of Applicant

PART B – PROJECT NARRATIVE (NOT TO EXCEED 10 PAGES)

Summary Description of Project

What We Intend to Do

Numerous watershed restoration projects have been and are being implemented in the Cottonwood Creek Watershed, Shasta and Tehama counties, without benefit of a comprehensive watershed management plan. This watershed has been identified in the CALFED Ecosystem Restoration Program Plan as significant. It is the largest undammed tributary to the Sacramento River on the west side of the Sacramento Valley and is the primary contributor to gravel recruitment for the Upper Sacramento River.

This project will culminate in a Cottonwood Creek Watershed Management Plan (WMP) produced by the Cottonwood Creek Watershed Group (CCWG). CCWG is a non-profit organization comprising landowners, business owners, agency representatives, and other local stakeholders, which organized with CALFED funding.

The WMP will provide a rational, science-based approach to managing the watershed. The WMP will ensure that restoration and management actions implemented in the Cottonwood Creek watershed are mutually complementary, compatible with CALFED Watershed Program and environmental restoration goals and objectives, and supported by local community stakeholders and resource agencies within the watershed. Additionally, as an unimpaired tributary to the Sacramento River, the watershed will provide valuable information regarding the benefits of unimpaired streams, especially in comparison with other projects on impaired streams in the region.

The WMP will build on the *Cottonwood Creek Watershed Assessment*, recently completed by the CCWG. The Watershed Assessment documents existing available data, defines recent trends contributing to current watershed baseline conditions, provides recommendations for further study, and identifies gaps in the data record. The WMP will (1) identify overall watershed management objectives in cooperation with landowners, resource agencies, and other interested members of the community (stakeholders), (2) recommend specific management or restoration actions to achieve these objectives, and (3) enable the CCWG to coordinate planned and ongoing management, restoration, and monitoring actions.

The WMP will focus on the following watershed management issue areas:

- Erosion and Sedimentation
- Flooding
- Rangelands
- Timber
- Green Belts/Riparian Corridors
- Aquatic Habitats
- Terrestrial Habitats
- Groundwater
- Water Quality

Project Location

As defined by CALFED, the Cottonwood Creek watershed comprises two distinct ecological management units (EMU): upper Cottonwood Creek EMU and lower Cottonwood Creek Fan EMU. The State Water Resources Control Board (SWRCB) lists these areas, respectively, as Cottonwood

Headwaters, Catalog Number 18020113 and Lower Cottonwood, Catalog Number 18020102. The watershed occupies portions of Shasta and Tehama counties.

Who is Involved

CCWG is a non-profit organization comprising landowners, business owners, agency representatives, and other local stakeholders. CCWG was organized with CALFED funding under Grant No. 98-E05.

Why We are Developing the WMP

CCWG members believe that good land use practices can beneficially affect the health of the watershed. CCWG members also believe that local, community-based watershed management in collaboration with resource agencies can best achieve the agencies' vision for the watershed in a way that conforms closely with the community's needs and preferences.

Expected Results

The project will result in a comprehensive WMP that develops and describes the desired condition of the watershed and outlines watershed management strategies aimed at achieving that condition. The WMP will provide direction for future watershed management activities, including those by public agencies and private interests. The WMP will be developed through an active public outreach/stakeholder involvement process using an existing network of contacts developed by the CCWG. The CCWG intends that the WMP, which will incorporate professional-quality documentation, will meet the goals and objectives of local community stakeholders and the CALFED Watershed Program in a manner compatible with the CALFED Environmental Restoration Program.

The WMP will be developed and maintained, refined, and periodically updated, as necessary, in an adaptive management framework. The technical background for the WMP will be established by incorporating historical and baseline data recently developed and analyzed in CCWG's Cottonwood Creek Watershed Assessment. Monitoring developed as part of the WMP will track changes in historical and baseline watershed conditions that occur as a result of natural processes, land use practices, and watershed management actions. Monitoring will facilitate adaptive management by revealing those actions that most effectively achieve watershed goals and objectives, particularly in areas that are not as well understood. Adaptive management also will be served by the active public outreach and education and data sharing elements of the proposed project, which will ensure that information on effective management and restoration actions is shared with CALFED, other resource agencies, and other local watershed groups and conservancies.

It is anticipated that once the WMP has been completed and adopted, pilot projects will be designed, where necessary, to test the feasibility and effectiveness of WMP strategies prior to implementing management and restoration strategies on a larger, watershed scale. These pilot projects will provide a further basis for fine-tuning the WMP and adaptively managing the watershed.

Conformance with CALFED Program Objectives and Watershed Program Initial Implementation Priorities

Relationship to Overall CALFED Program Objectives

The proposed WMP will focus on the following issue areas: erosion and sedimentation, flooding, rangelands, timber, green belts/riparian corridors, aquatic habitats, terrestrial habitats, groundwater, and water quality. The proposed WMP is fully compatible with the following overall CALFED program objectives:

- Water supply reliability

- Water quality
- Ecosystem quality
- Levee stability/flood control

The WMP issue areas will be linked in a report that shows the interrelationships among the issue areas and between issue areas and the goals and objectives of CCWG and the CALFED Bay-Delta Program. Human use of the watershed is necessary to ensure regional economic vitality, employment, and a high quality of life for watershed residents. Consideration must be given to interplay between water quality, range and forage, agriculture and forestry, fisheries, wildlife, and recreation as they relate to CALFED primary objectives. Thus, human activities, such as rangeland and timber management, are identified as focus areas with the understanding that there are linkages to watershed processes such as erosion and sedimentation, riparian health, and aquatic habitat. Other relationships between the proposed project's characterization of natural and human-affected watershed processes and CALFED goals and objectives are readily established and will be fully developed in the WMP. For example, water retention strategies addressed in the WMP, such as wetland and off-channel pond restoration, aquifer storage, and channel meander restoration, could have a beneficial effect on attenuating peak flood flows (contributing to levee stability) and may also redistribute inter-annual runoff (thereby improving water supply reliability). The proposed investigation of groundwater aquifer conditions relates to exploring conjunctive use opportunities (also contributing to water supply reliability). Investigations of spawning gravel, riparian habitat, water quality and temperature, and instream structures have implications for ecosystem quality. As a comprehensive WMP, the proposed project will explicitly establish these relationships to enable identification and analysis of watershed management strategies that will contribute to achieving CALFED objectives.

Water Supply Reliability. The WMP will explore means of increasing total annual average yield through flow retention (i.e., by restoring natural, flow retention processes, such as wetlands rather than through artificial dams and impoundments) and investigate aquifer condition, which may involve using monitoring data from California Department of Water Resources (DWR), Anderson-Cottonwood Irrigation District (ACID), and the Redding Area Water Council (RAWC). Conjunctive use opportunities to improve water supply reliability are being addressed through ACID as part of a separately funded CALFED conjunctive use grant. Information from this program will be available to the CCWG through the established partnership between CCWG and ACID. ACID's conjunctive use project will include drilling monitoring wells and taking periodic water level measurements in those wells and existing production wells to evaluate the feasibility of a conjunctive use program in the southern portion of the Redding Groundwater Basin. ACID also participates in the RAWC, a consortium of 13 Redding Basin water purveyors and other interests. RAWC has recently completed Phase 2B of its regional water resources management plan, with Phase 2C underway; conjunctive use is one of the core plan elements. The initial phase of ACID's conjunctive use grant is valued at \$300,000, and work performed to date by the RAWC has exceeded \$500,000, plus several hundred thousand dollars in in-kind services (staff time) by purveyors contributing to this effort. In Phase 2B, RAWC developed an integrated Redding Basin groundwater/surface-water model at a cost of more than \$180,000. The database for the model includes precipitation and runoff data within the Cottonwood Creek watershed over a representative range of hydrologic conditions. These data will be useful to CCWG and available for the WMP. All RAWC efforts were locally funded. Use of the model by CCWG is available through a written request to RAWC.

Water Quality. The WMP will address erosion and sedimentation, rangelands, timber practices, and green belts/riparian corridors. Erosion and sediment transport from dirt roads in the watershed is one issue that will be addressed in the WMP in conjunction with ongoing efforts. All of these issues directly relate to improving and maintaining water quality. The WMP also will address achieving and maintaining healthy aquatic habitats and terrestrial habitats, which can contribute to water quality. For example, thriving riparian habitats help to protect water quality conditions that benefit fish and

wildlife by filtering sediments and other unwanted constituents before they reach Cottonwood Creek and by providing shade to keep water temperature cooler. The Watershed Assessment recently conducted by CCWG generated baseline data on these variables. The WMP will address water quality, including temperature, nutrients, and other constituents, and will likely prescribe water quality monitoring.

Ecosystem Quality. The primary issue areas to be fully developed in the WMP applicable to ecosystem quality include erosion and sedimentation, rangelands, timber practices, green belts/riparian corridors, aquatic and terrestrial habitats, and water quality. Through these issue areas, the WMP will address riparian habitat restoration; revegetation; natural stream processes; water temperature and quality; stream channel, bank, and floodplain restoration; fishery resources, riparian community conditions, endangered species, and wildlife resources; engineered instream structures; and the agricultural and forestry management practices that affect ecosystem quality. The recently completed CCWG Watershed Assessment generated baseline data on these issues and identified associated monitoring requirements.

Levee Stability. The WMP will explore management strategies that will provide improved flood protection. For example, improved rangeland and timber practices and improved terrestrial and aquatic habitats can help to attenuate peak flood flows, by providing flow retention through wet meadow restoration, bank protection, and stream channel and floodplain restoration. Attenuated peak flood flows will help to protect downstream levees. These strategies may also redistribute inter-annual runoff. Baseline hydrologic data, including annual flow and flood hydrographs, were compiled for the Watershed Assessment. The Watershed Assessment also will contribute information on fluvial geomorphology (e.g., channel configuration, sediment transport, and gravel recruitment), which will facilitate management of the hydrological regime, including yield and peak flood flows.

CALFED Watershed Program Goals and Objectives and Implementation Commitments

In addition to addressing overall CALFED program objectives, the proposed project will be carried out in a manner that is fully compatible with CALFED Watershed Program Implementation Commitments and CALFED Watershed Program Performance Indicators and Measurements. This proposal describes CCWG's community-based approach for developing both the Watershed Assessment and the WMP, with significant participation by diverse local stakeholders and representatives of local public agency leadership. Regarding environmental justice, CCWG's programs will locally benefit a rural, largely agricultural, and economically disadvantaged community. Through its 3,200-address mailing list, CCWG has notified the public, affected public agencies, and Indian tribes of the proposed project and invited their input and participation. The WMP, as described in this proposal, will not require land acquisition and will help to protect agricultural land through improved rangeland management and flood control. CCWG will coordinate development of the WMP with CALFED agencies and non-CALFED resource agencies and local government agencies, which are represented in CCWG membership and on the CCWG Technical Advisory Committee (TAC). CCWG is fully aware of its responsibilities to provide all necessary CEQA/NEPA documentation, where applicable, and to acquire any necessary permits and approvals to implement management and restoration measures that are recommended by the WMP. The WMP will be explicitly science-based and will incorporate the principles of adaptive management. All applicable water rights will be fully protected by the WMP. Although development of the WMP will not result in the "taking" of any protected species, the CCWG will obtain any required incidental take authorizations necessary to implement specific, subsequent actions recommended by the WMP.

Community Involvement

CCWG is a non-profit organization comprising landowners, business owners, agency representatives, and other local stakeholders. The CCWG was formed with the assistance of a CALFED grant in

response to urging of local communities and agencies in the watershed that recognized the need for such a community-based coordinating group. To implement the CCWG commitment to public outreach and community involvement, our mailing list includes more 3,200 addresses within the watershed. Hundreds of people have attended our monthly meetings, and 20 to 40 attend regularly. No opposition to the goals and objectives of CCWG or the WMP has been publicly expressed. All of our programs and projects, including the recently completed Watershed Assessment and the proposed WMP, are enhanced by our ongoing public outreach and participation program.

CCWG members believe that good land use practices can beneficially affect the health of the watershed and that local, community-based watershed management in collaboration with resource agencies can best achieve the agencies' vision for the watershed in a way that conforms closely with the community's needs and preferences. To put these assumptions into action, CCWG has reached out to landowners and other interested stakeholders in the watershed; enlisted the assistance of members of the local business, scientific, and regulatory communities to serve on its TAC; and formed strategic alliances with public agencies to leverage their resources and technical and scientific expertise. The TAC includes 17 individuals from 10 local, state, and federal agencies and private industry.

The CCWG coordinated an extensive public outreach effort for the Watershed Assessment. This effort will continue during WMP development, which will identify the desired watershed condition and recommend actions to achieve that condition. The CCWG Board of Directors may form ad hoc committees of representative stakeholders to address specific WMP focus areas.

CCWG members, participants, and collaborators include Shasta and Tehama county governments, the Shasta and Tehama County Farm Bureaus, Anderson-Cottonwood Irrigation District (ACID), Sierra Pacific Industries, local homeowners' associations, Evergreen and other schools, timber managers, water companies, fishing guides, U.S. Army Corps of Engineers (COE), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), Tehama County Resource Conservation District (TCRCD), Western Shasta Resource Conservation District (WSRCD), Natural Resource Conservation Service (NRCS), California Department of Water Resources (DWR), Bureau of Land Management (BLM), U.S. Forest Service (USFS), National Marine Fisheries Service (NMFS), California Department of Transportation (Caltrans), University of California Extension, California Department of Forestry and Fire Protection (CDF), gravel extractors, and other interested parties.

Evergreen School operates an environmental education program. It is anticipated that Evergreen and other schools will participate in monitoring as a practical educational experience. There also is a potential for persons working in the timber industry and other private interests to participate. For example, private interests are monitoring the effects of the Rosewood Ranch Vegetation Management Program. These and other citizen monitoring opportunities will be explored as part of WMP project. Citizen monitoring will represent valuable in-kind services that support the WMP.

Additional community involvement in the WMP will derive from the active integration of the WMP with other current activities in the watershed. For example, interaction of the WMP with the NRCS grazing management program and the USFS fuel management program will foster the involvement by persons associated with these programs with the WMP and the CCWG.

Ms. Vievea Swearingen, CCWG Coordinator, is the responsible fiscal agent who will coordinate the proposed project and administer the funds. She also is responsible for managing CCWG's public participation and community involvement programs.

Watershed Context

Basic Assumptions

Many of CCWG's assumptions, goals, and objectives derive from CALFED's Ecosystem Restoration Program Plan (ERPP) (CALFED, Revised Draft, February 1999) and Watershed Program Plan (CALFED, Final Programmatic EIS/EIR Technical Appendix, July 2000). Among CCWG's assumptions are that good land use practices (e.g., forestry management, agricultural practices) can beneficially affect watershed health and that local community-based watershed management in collaboration with resource agencies can best achieve the ERPP vision for the Cottonwood Creek Ecological Management Zone in a way that conforms closely with the community's needs and preferences. To apply these assumptions to development of specific WMP project goals, objectives, and proposed actions, CCWG has reached out to landowners and other interested stakeholders in the watershed, enlisted the assistance of members of the scientific and regulatory community to serve on its TAC, and formed strategic alliances with public agencies and private industry professionals to leverage their resources and technical and scientific expertise.

Project History and Justification

In its vision for the Cottonwood Creek Ecological Management Zone in Volume II of CALFED's ERPP (CALFED, February 1999, page 225), it states that "The creation of a watershed management plan by a local watershed conservancy or planning agency is necessary." Acting on this vision, a group of local landowners and collaborating or participating agencies and industrial interests determined to form the CCWG to coordinate local stakeholder and agency efforts to manage the watershed. CALFED awarded Grant No. 98-EO5 to organize the CCWG. The ERPP (CALFED, February 1999, page 227) states that "Restoration of this (i.e., Cottonwood Creek) Ecological Management Zone requires developing and implementing a comprehensive watershed management program for the upper and lower areas."

Recognizing that the first step in developing a WMP is to compile existing watershed baseline data and identify gaps in the data, CCWG applied for and received CALFED Grant No. 2000-EO3 for the *Cottonwood Creek Watershed Assessment*, which was recently completed. In the notification of the award of the grant, CALFED stated that, "CALFED previously funded the development of the Cottonwood Creek Watershed Group, a landowner group which works with the local agencies and other stakeholders. This project will support the development of a watershed assessment to guide future activities within Cottonwood Creek. Because this is an important tributary, the Interim Science Panel recommended funding a year of continued work in this watershed." The Watershed Assessment includes mapping and GIS-compatible databases to characterize historical and current watershed conditions.

Relationship to Other Watershed Activities

The Watershed Assessment identified historical and current management and restoration activities undertaken in the watershed by other private interests and agencies to contribute to development of WMP strategies. Of particular value will be the identification of existing monitoring associated with these activities that can contribute to the development and maintenance of the WMP. Among the previous assessments identified is the Beegum Watershed Analysis (Yolla Bolla Ranger District, South Fork Management Unit, Shasta-Trinity National Forests, March 1997). Similar in approach to the proposed Cottonwood Creek WMP, this analysis focused on three management objectives (timber production, wildlife management, and fuels management) to address core watershed issues, such as erosion processes, hydrology and stream channel conditions, water quality, vegetation, species and habitats, and human land uses. The Beegum Watershed Analysis indicates that monitoring programs

have been established to track watershed conditions. CCWG will explore whether these and other monitoring activities revealed by the Watershed Assessment are relevant to the WMP.

CCWG's efforts mirror successful, local landowner-driven watershed planning and management programs in other northern California communities located on Sacramento River tributaries. The Mill Creek Conservancy in Tehama County has successfully established itself as the local steward of the watershed; forged alliances among landowners, educational institutions, public agencies, businesses, and other interests; compiled baseline data; and developed the Mill Creek Watershed Management Strategy Report. A local watershed conservancy in Tehama and Glenn counties worked with 22 federal, state, and county agencies, irrigation districts, private citizens, and businesses to develop the Fish, Wildlife, and Water Use Management Plan for Lower Stony Creek. In Plumas County, landowners, conservancy groups, and public agencies joined to develop a watershed management plan for the upper Feather River and its tributaries and implement restoration actions under a variety of CALFED, Proposition 204, and Section 319(h) grants. A similar effort is underway in the Deer Creek watershed of Tehama County. These projects, all facilitated by CCWG's science and engineering consultant, CH2M HILL, demonstrate the effectiveness of a community-based approach to watershed management that incorporates local stakeholder interests, public agency collaboration, and public education and outreach. The physical processes that will be characterized in the WMP and the approaches that will be employed by CCWG in developing the WMP are also similar to programs have been undertaken in the Clear Creek Watershed of Shasta County and the Battle Creek Watershed in Shasta and Tehama counties.

Support for Local Decisionmakers

Local Decisionmaker Participation

As noted throughout this proposal, CCWG's TAC included 17 representatives from 10 local government agencies and local offices of state and federal resource agencies, including CALFED agencies. Thus, the WMP will be developed with full participation by these agency representatives, along with a broad spectrum of other local stakeholders.

Coordination With Other Management and Monitoring Efforts in Watershed

The WMP will identify the types of monitoring information necessary to determine whether the goals and objectives are being met through WMP strategies. Future monitoring will detail how data will be collected and analyzed. CCWG intends to leverage existing agency monitoring programs that are relevant to the WMP, which will constitute a significant cost-share element of the CCWG program. CCWG's Watershed Assessment identified current watershed activities being undertaken by public agencies and private interests, and the WMP will provide a vehicle to coordinate such activities, including monitoring, to achieve CCWG and CALFED goals and objectives. For example, CDF and the California Division of Mines and Geology have ongoing monitoring programs within the watershed that might have implications for the WMP. As the development of the WMP begins with the formulation of watershed management strategies, CCWG will begin to construct monitoring efforts that will provide data to evaluate the effectiveness of watershed management strategies and actions. Many existing monitoring programs, such as rainfall and streamflow gages, biological monitoring of salmonid redds and carcass counts, salmonid outmigration counts, and groundwater monitoring, will contribute to the monitoring program developed for the WMP. CCWG's *Cottonwood Creek Watershed Assessment* addressed the need to monitor other watershed conditions. The CCWG TAC and general membership includes many agency staff who are willing to share monitoring information with CCWG.

Decisionmakers within the watershed will use these monitoring results to select and refine adaptive watershed management strategies that are shown by monitoring data to result in conditions that most

closely conform to CALFED and CCWG goals and objectives for the watershed. These strategies are, in turn, informed by the ERPP visions for Cottonwood Creek. Additionally, opportunities may exist to facilitate CVPIA anadromous fish doubling goals through projects in the watershed. As noted below (Technology Transfer), by sharing data among stakeholders, collaborating agencies, and other community-based watershed groups, decisionmakers can identify and replicate the strategies shown by monitoring data to be most effective.

Technology Transfer

The CCWG maintains an active outreach program to educate and inform the public and promote broad community participation. Monthly stakeholder meetings have been attended by hundreds of individuals, and 3,200 people receive notices of these meetings. The CCWG TAC includes 17 members who are associated with 10 local land use planning and local, state, and federal resource agencies. The WMP will be developed with intensive stakeholder and agency involvement, and will integrate its watershed strategies with those of the NRCS, USFS, DWR, U.S. Bureau of Reclamation, NMFS, CDFG, USFWS, COE, and other agencies. All monitoring information on the effectiveness of the projects will be shared among the stakeholders and participating agencies. In addition to the outreach activities, information exchange will be promoted through project technical reports, progress reports, and CCWG newsletter and media releases. The development of the WMP will make all agencies and individuals working in the watershed aware of ongoing watershed activities to integrate the watershed goals and objectives of the NRCS, USFS, and other agencies with CALFED and CCWG goals and objectives.

CCWG also intends to regularly share information with other local watershed groups, some of which are identified elsewhere in this proposal, to help maximize the benefits of watershed management. The need for communication regarding the effectiveness of watershed actions is underscored by the CALFED Watershed Program Plan, which states, “Emphasis will be placed on developing sustainable locally led programs and projects that can be maintained and replicated within the local communities of the Bay-Delta watershed.”

PART C – PROPOSED SCOPE OF WORK (Part C not to exceed 5 pages)

1. BACKGROUND AND GOALS

Why the project is needed: The proposed Watershed Management Plan (WMP) is needed to provide a rational, science-based approach to managing the 605,000-acre watershed in a cooperative manner with a diverse set of stakeholders. Cottonwood Creek is the largest undammed west-side tributary of the Sacramento River and is a priority in CALFED's Ecosystem Restoration Program Plan because of its influences on the quality of the state's water supply, the presence of special-status fish species, its status as the largest source of spawning gravel for the Sacramento River, and many other factors. The resource agencies have indicated high interest in preserving and enhancing the watershed, but we believe that solutions need to be found in conjunction with local needs as well as resource agency objectives. The WMP will ensure that restoration and management actions implemented in the Cottonwood Creek watershed are mutually complementary, compatible with CALFED environmental restoration goals and objectives, and supported by local community stakeholders and resource agencies within the watershed.

CCWG was formed in 1998 and has been working with landowners, resource agency staff, and funding agencies to develop a watershed management plan that preserves local stewardship of the watershed resources. CCWG has built strong contacts with landowners in the watershed and state and federal resource agencies. The time is now ripe to use these contacts to establish focused working groups to address challenges and opportunities for effective watershed management. The recently completed Watershed Assessment provides a sound foundation for a locally focused WMP that addresses the nine important resource or issue areas outlined in Part B.

The lack of a comprehensive watershed management plan for the Cottonwood Creek watershed makes it difficult to implement beneficial watershed projects. We now have a unique opportunity to bridge the gap between landowners and regulatory agencies to plan beneficial actions consistent with stakeholder needs. Completion of this plan will serve as an important milestone in managing the Cottonwood Creek watershed. We have reached a critical stage in CCWG's efforts to maintain the momentum. Without continued funding and support from the CALFED Watershed Program, our progress will be slowed and our group faces the prospect of being unable to continue to function as local watershed stewards.

Goals and anticipated outcomes: The goal is to develop a cooperative WMP that outlines desired watershed conditions. A strategy of focused stakeholder/agency workshops will result in recommended actions that are supported by stakeholders and agencies, thus making actions outlined in the WMP easier to implement. If it is not possible to reach consensus on topics, studies or pilot projects may be recommended to resolve conflicts and establish a knowledge base for future actions. The WMP will document the successes, challenges, and information needs of the various issue areas.

Compatibility with overall CALFED Watershed Program goals: The WMP will focus on the following issue areas: erosion and sedimentation, flooding, rangelands, timber, green belts/riparian corridors, aquatic habitats, terrestrial habitats, groundwater, and water quality. A report will summarize results of the issue area workshops, describe inter-relationships between issue areas, and recommend courses of action for watershed improvements. The report will also describe the connection between the issue areas and the overall goals and objectives of the CALFED Bay-Delta Program, including water supply reliability, water quality, ecosystem quality, levee stability/flood control. By explicitly establishing these relationships, CCWG will be able to identify and analyze watershed management strategies that will contribute to achieving these CALFED objectives.

In addition to addressing overall CALFED program objectives, the WMP will be developed in a manner that is fully compatible with CALFED Watershed Program goals and objectives. This proposal describes CCWG's community-based approach for developing the WMP, with significant participation by diverse local stakeholders, educational institutions, and representatives of local public agency leadership. Regarding environmental justice, CCWG's programs will locally benefit a rural, largely agricultural, and economically disadvantaged community (Median income: \$13,594¹, compared to statewide median income of \$35,798 in 1990). Through its 3,200-address mailing list, CCWG has notified the public,

¹ State of California Employment Development Department, <http://www.calmis.cahwnet.gov/file/demoinc/inc90pt7.htm>

affected public agencies, and Indian tribes of the proposed project and invited their input and participation. Actions recommended in the WMP may require land acquisition for future implementation and may protect the viability of agricultural land use through improved farm and rangeland management. CCWG will coordinate WMP development with both CALFED and non-CALFED agencies and local government agencies, which are represented on the CCWG Technical Advisory Committee (TAC). CCWG will provide all necessary CEQA/NEPA documentation, and coordinate acquisition of any necessary permits and approvals, including “incidental take” permits, to implement management and restoration measures that are recommended by the WMP. The WMP will be explicitly science-based and will incorporate the principles of adaptive management. It is not anticipated that existing water rights will be affected by the WMP.

2. PROPOSED WORK TO BE PERFORMED

Task 4. Issue Area Workshops

The purpose of this task is to facilitate workshops on each issue area identified below. A preliminary list of individuals and agencies that will be targeted for the workshops is presented in Table 1.

- Erosion
- Flooding
- Rangelands
- Timber
- Greenbelts/Riparian
- Aquatic Habitat
- Terrestrial Habitat
- Groundwater
- Water Quality

Workshops will be open to the public and the specific target list may change as more specific contacts are made. Notice for the workshops will be made through the regular CCWG newsletter, which reaches 3,200 households in the watershed.

Each issue area will be the subject of two workshops, one to orient participants to the challenges and needs of the various interests and one to finalize participant recommendations. Two workshops may not be adequate to reach consensus on all elements of the issue areas. However, the workshops will focus on identifying areas of agreement among the interests. Where consensus is not reached, but is deemed possible, actions will be identified to help resolve the disagreement – likely through additional study or a pilot project. For controversial areas, long-range monitoring or continued meetings may be recommended to facilitate eventual resolution of issues. Limiting the number of workshops is partially a cost-saving measure.

Table 1
Preliminary List of Targeted Participants for Workshops^a

Issue Area	Board Representative	Targeted Landowner	TAC/Agency Representative
Erosion	Jackie Baker Tom Harrington	Davis Family Lutz Family Sartori Family	RWQCB DWR Caltrans ACID
Flooding	Roy Richards Robin Rich	Gibson Family Lema Family Anderson-Cottonwood Concrete	DWR COE ACID
Rangeland	Jackie Baker Robin Rich	Graves Ranch McAulliffe Family Ranching	UC Davis Cooperative Extension – Tehama and Shasta NRCS USFWS CDFG
Timber	Roy Richards Tom Harrington	Sierra Pacific Industries Crane Lumber Roseburg Timber Company	USFS UC Davis Cooperative Extension CDF USFWS CDFG
Greenbelt/Riparian	Dennis Mitchell Lori Lund	Cottonwood Creek Sand & Gravel Bengard Ranching Julie Graham	CDFG USFWS NMFS
Aquatic	Tom Harrington Robin Rich	Cottonwood Creek Sand & Gravel TBD	NMFS ACID USFWS CDFG
Terrestrial	Lori Lund Roy Richards	Cottonwood Creek Ranch Clarissa Hale Martha Lutz	CDFG USFWS NRCS
Ground Water	Dennis Mitchell Jackie Baker	Richard Edsell Clark Goodrich	ACID RWQCB DWR
Water Quality	Lori Lund Dennis Mitchell	Anderson-Cottonwood Concrete TBD	DWR RWQCB

^a Note: this list is preliminary and is meant to serve as a starting point for noticing the workshops. It is likely that other parties may be identified.

ACID = Anderson-Cottonwood Irrigation District; CDF = California Department of Forestry and Fire Protection; CDFG = California Department of Fish and Game; COE = U.S. Army Corps of Engineers; DWR = California Department of Water Resources;

NMFS = National Marine Fisheries Service; NRCS = Natural Resource Conservation Service; RWQCB = Regional Water Quality Control Board; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service

Each issue area will require implementation of the following subtasks:

- 4.1 Identify and contact targeted individuals for the specific workshops. Identify representative landowners and agency representatives and schedule introductory workshop. Distribute basic information to the participants.
 - 4.1.1 through 4.1.9 Enact steps outlined above for Erosion, Flooding, Rangelands, Timber, Greenbelts/ Riparian, Aquatic Habitat, Terrestrial Habitat, Groundwater, and Water Quality
- 4.2 Conduct introductory workshop to frame issues, outline concerns of the participants, and identify information needs. Focus participants on describing the desired condition of the watershed.
 - 4.2.1 through 4.2.9 Enact steps outlined above for Erosion, Flooding, Rangelands, Timber, Greenbelts/ Riparian, Aquatic Habitat, Terrestrial Habitat, Groundwater, and Water Quality

- 4.3 Summarize workshop, conduct supporting research, prepare for final workshop
 - 4.3.1 through 4.3.9 Enact steps outlined above for Erosion, Flooding, Rangelands, Timber, Greenbelts/ Riparian, Aquatic Habitat, Terrestrial Habitat, Groundwater, and Water Quality
- 4.4 Conduct final workshop to identify areas of agreement, potential areas of agreement requiring additional information in the short-term, and areas requiring longer-term discussions and/or research.
 - 4.4.1 through 4.4.9 Enact steps outlined above for Erosion, Flooding, Rangelands, Timber, Greenbelts/ Riparian, Aquatic Habitat, Terrestrial Habitat, Groundwater, and Water Quality
- 4.5 Summarize findings in a technical memorandum.
 - 4.5.1 through 4.5.9 Enact steps outlined above for Erosion, Flooding, Rangelands, Timber, Greenbelts/ Riparian, Aquatic Habitat, Terrestrial Habitat, Groundwater, and Water Quality

Task Deliverables: 4.1 Information packages for workshop participants from each issue area. 4.2 Meeting summaries of initial workshops. 4.3 Meeting summaries of final workshops for each issue area. 4.4 Technical memorandum for each issue area outlining the desired condition, elements of concurrence, elements requiring additional information in the short-term, and elements requiring long-term discussions and/or research.

Success Criteria: Active participation in workshops, concurrence among workshop participants that technical memoranda accurately convey decisions reached at workshops, timely submittal of deliverables.

Task 5: Draft Watershed Management Plan

- 5.1 Prepare a draft Watershed Management Plan that includes the products of the tasks listed above. The WMP shall include the following narrative sections:
 - a. A brief introduction section including a statement of purpose, the project scope, and a description of the approach and techniques used during the project.
 - b. A list of task products previously submitted as outlined in the Schedule of Completion.
 - c. Summaries of the desired condition, elements of concurrence, elements requiring additional information in the short-term, and elements requiring long-term discussions and/or research outlined in the Technical Memoranda for the issue areas
 - d. Any additional information that is deemed appropriate by the Project Director.
- 5.2 Submit CD-ROM copies of the draft report to the Contract Manager, CCWG Board of Directors, and TAC members for review and comment.
- 5.3 Present results of the Draft WMP to a Stakeholder Meeting noticed by the CCWG.

Task Deliverables: 5.2. Draft Report. 5.3 Presentation of Report.

Success Criteria: Complete draft for review, timely submittal of deliverables, active participation in stakeholder meeting.

Task 6: Final Report

- 6.1 Prepare a final report that addresses, to the extent feasible, comments made by the Contract Manager, Board of Directors, TAC, and Stakeholders on the draft report. Submit one CD-ROM and two copies of the final project report to the Contract Manager for review and acceptance.

Task Deliverables: 6.1. 10 copies of final report and 100 reproducible copies on CD-ROM.

Success Criteria: Submittal of complete final, timely submittal of deliverables.

3. TARGET COMPLETION DATES

Task No: Deliverables	Target Completion Dates
Task 1: Project Administration	
1.2 Quarterly/Monthly Progress Reports	Each month of project prior to the 10 th of each month
1.5 Contract Summary Form	Month 3
1.6 List of subcontracted tasks, Good Faith Effort documents, quarterly/monthly Utilization Reports	Month 2
1.7 Subcontractor Documentation	Month 3
1.8 Expenditure/Invoice Projections	Month 3
1.9 Project Survey Form	Month 24
Task 2: CEQA/NEPA Documents and Permits, if applicable	
2.1 CEQA/NEPA Documentation	Month 2
2.2 Permits	N/A
Task 3: Quality Assurance Project Plan, if applicable	
3.1 SAP/QAPP	Month 4
Task 4: Issue area workshops	
4.1 Information packages for workshop participants from each issue area.	Subtasks 4.1.1 through 4.1.3: Month 5 Subtasks 4.1.4 through 4.1.6: Month 9 Subtasks 4.1.7 through 4.1.9: Month 13
4.2 Meeting summaries of initial workshops.	Subtasks 4.2.1 through 4.2.3: Month 6 Subtasks 4.2.4 through 4.2.6: Month 10 Subtasks 4.2.7 through 4.2.9: Month 14
4.4 Meeting summaries of final workshops for each issue area.	Subtasks 4.4.1 through 4.4.3: Month 7 Subtasks 4.4.4 through 4.4.6: Month 11 Subtasks 4.4.7 through 4.4.9: Month 14
4.5 Technical memorandum for each issue area	Subtasks 4.5.1 through 4.5.3: Month 8 Subtasks 4.5.4 through 4.5.6: Month 12 Subtasks 4.5.7 through 4.5.9: Month 15
Task 5: Draft Report	
5.2. Draft Report	Month 17
5.3 Presentation of Report	Month 18
Task 6: Final Reports	
6.1. 10 copies of final report and 100 reproducible copies on CD-ROM.	Month 20

PART D1 - BUDGET SUMMARY SHEET – TASK BUDGET BREAKDOWN (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
Task 1 – Project Administration	\$20,000	\$	\$20,000
Task 2 – CEQA/NEPA Documents and Permits	\$2,000		\$2,000
3. Task 3 – Quality Assurance Project Plan	\$3,000		\$3,000
4. Task 4 – Workshops	\$130,000		\$130,000
5. Task 5 – Draft Document	\$25,000		\$25,000
6. Task 6 – Final Reports	\$20,000		\$20,000
TOTAL BUDGET	\$200,000	\$	\$200,000

PART D2 - BUDGET SUMMARY SHEET – LINE ITEM Budget (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Personnel Services	<u>\$20,000</u>	<u>\$</u>	<u>\$20,000</u>
2. Operating Expenses	<u>\$5,000</u>	<u></u>	<u>\$5,000</u>
3. Property Acquisitions			
a. Equipment	<u></u>	<u></u>	<u></u>
b. Furniture	<u></u>	<u></u>	<u></u>
c. Portable assets	<u></u>	<u></u>	<u></u>
d. Electronic data software/hardware	<u></u>	<u></u>	<u></u>
e. Processing equipment	<u></u>	<u></u>	<u></u>
f. Miscellaneous	<u></u>	<u></u>	<u></u>
4. Professional and Consultant Services	<u>\$170,000</u>		<u>\$170,000</u>
5. Contract Laboratory Services	<u></u>	<u></u>	<u></u>
6. Construction Expenses	<u></u>	<u></u>	<u></u>
7. General Overhead	<u>\$5,000</u>	<u></u>	<u>\$5,000</u>
8. TOTAL BUDGET	<u>\$200,000</u>	<u></u>	<u>\$200,000</u>